<center>**REMARKS**</center>

This Amendment is fully responsive to the non-final Office Action mailed March 12, 2010. The applicants thank the Examiner very much for granting an Interview and reconsidering the rejections made in the prior Office Action. It is respectfully submitted that the claims contain limitations that patentably define over the references newly cited by the Examiner in the current Office Action, for the reasons discussed in these remarks. Therefore, reconsideration and allowance of the pending claims is appropriate and respectfully requested.

<center>*Claims 1, 9 and 18*</center>

The Office Action rejects claims 1, 9 and 18 in the application under 35 U.S.C. § 102(b) as anticipated by an article published by Ko et al., "Chest CT: Automated Nodule Detection and Assessment of Change Over Time - Preliminary Experience", Radiology, 218 : 267-273 (2001) (hereafter "Ko"). The Office Action correctly points out that, in Ko, object constituents to be registered are "selected independently" or "without consideration" of the image data, as recited in the claims. However, it is respectfully submitted that at the same time Ko fails to disclose registering "only" the image areas associated with object constituents which are relevant to a predetermined task, as recited in claims 1, 9 and 18. Therefore, reconsideration of the rejections of claims 1, 9 and 18 as anticipated by Ko is respectfully requested.

Claim 1 recites a data processing unit set up in part to segment a first and second image into various "object constituents." The methods of claims 9 and 18 similarly include segmentation of the images into various "object constituents." Ko performs these portions of claims 1, 9 and 18, in that Ko segments the images into object constituents comprising the subject's lungs (see Ko, page 269, col. 1, para. 3 through col. 3, para. 1), trachea (see Ko, Figure 3 and page 270, col. 1, para. 2), sternum and vertebrae (see Ko, Figure 3 and page 270, col. 1, para. 5 through col. 2, para. 1). The subject's lungs are further segmented by Ko into two subsets, a brighter subset containing normal structures (vessels, bronchi) and lung pathologic conditions (nodules), and a darker subset containing the aerated lung. See Ko, page 269, col. 3, para. 3.

Claim 1 further requires, however, registration of "<u>only</u> those image areas associated with object constituents <u>which are relevant to a predetermined task</u>" (emphasis added). Claim 9 similarly recites registration "<u>only</u> of the images areas associated with object constituents <u>relevant to a</u>

predetermined task" (emphasis added). And claim 18 recites registering "only the selected object constituents" which are "relevant to a predetermined task" (emphasis added). The "predetermined task" in Ko is the same as the preferred embodiment of the present application: trend control of lung tumors. See Ko, page 267, col. 2, para. 2; Application, page 2, lines 16-20. The only object constituent that is relevant to that predetermined task is the patient's lungs, and the detected nodules within the lungs. See Application, page 2, lines 16-20 ("In the trend control of lung tumors, for instance, the lungs are the relevant object constituents.") The other object constituents of Ko — namely the subject's trachea, sternum and vertebrae — are not relevant to the predetermined task of trend control of lung tumors. Rather, those object constituents are located entirely outside of the subject's lungs.

Nonetheless, according to Ko, those other object constituents are registered in the two images along with the lungs. See Ko, Figure 3 and page 270, col. 1, para. 4 through col. 2, para. 1. Because of the registration of these additional object constituents along with the lungs, Ko fails to meet the limitation in claim 1 requiring registration of "only" those image areas associated with object constituents "which are relevant to a predetermined task."

For at least these reasons, Ko does not disclose registration of "only" those image areas associated with object constituents "relevant to a predetermined task", as recited in claims 1, 9 and 18. Therefore, Ko does not disclose each and every limitation of these claims, and the rejection of claims 1, 9 and 18 as being anticipated by Ko should be reconsidered and withdrawn.
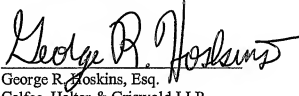
Claims 2-8, 10-17 and 19

Claims 2-8, 10-17 and 19 each ultimately depend from parent independent claim 1, parent independent claim 9 or parent independent claim 18. The Office Action rejected each of these dependent claims under 35 U.S.C. § 103(a) as being unpatentable over Ko (discussed above in connection with the parent independent claims) in view of one other companion reference. In each rejection, Ko was relied upon as teaching the limitations of the parent independent claims, and the companion reference was cited as teaching the limitations of one or more dependent claim. For at least the reasons identified above, however, Ko does not anticipate claim 1, 9 or 18. On that same basis, it is respectfully submitted that the corresponding obviousness rejections of the dependent claims should be reconsidered and withdrawn.

Conclusion

This Amendment is fully responsive to the non-final Office Action mailed March 12, 2010. It is respectfully submitted that the claims contain limitations that patentably define over the references cited by the Examiner, for the reasons provided in the remarks above. Therefore, reconsideration and allowance of the pending claims is appropriate and respectfully requested.

Respectfully submitted,

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